

STATE OF CALIFORNIA
FISH AND GAME COMMISSION
INITIAL STATEMENT OF REASONS FOR REGULATORY ACTION
(Pre-publication of Notice Statement)

Amend Section 7.50(b)(5)(E) and 7.50(b)(156)(F), (G) and (H)
Title 14, Chapter 3, Article 3, California Code of Regulations
Re: Amended Sport Fishing Regulations for a Portion of the Mainstem Sacramento River and the Mouth
of the American River to Protect Winter-run Chinook Salmon

I. Date of Initial Statement of Reasons: March 5, 2003

II. Dates and Locations of Scheduled Hearings:

(a)	Notice Hearing:	Date:	April 4, 2003
		Location:	Visalia
(b)	Adoption Hearing:	Date:	June 20, 2003
		Location:	Mammoth Lakes

III. Description of Regulatory Action:

(a) Statement of Specific Purpose of Regulation Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

Sacramento River winter-run Chinook salmon were listed as endangered by the Fish and Game Commission (Commission) on September 22, 1989. The National Marine Fisheries Service listed the run as endangered under the federal Endangered Species Act in February 1994. Although the population has increased in recent years, the winter-run Chinook population remains well below levels defined for recovery of the run.

To prevent harvest of upstream migrating winter-run Chinook salmon, current regulations prohibit the retention of Chinook salmon in the Sacramento River from the Deschutes Road Bridge (near Redding) to Bend Bridge (approximately 5 miles upstream from Red Bluff) from January 15 through July 31, and from Bend Bridge to the Carquinez Bridge from January 15 through July 15. To facilitate enforcement of angling regulations on the lower American River, current regulations also prohibit the retention of Chinook salmon in the American River from the Jibboom Street Bridge to the river mouth from January 15 through July 15, the same no-retention period as on the main stem Sacramento River. Based on the best available data at the time these regulations were implemented, the no-retention periods were expected to cover the entire period when adult winter-run Chinook would occur in these areas.

On October 24, 2002, the Commission approved an emergency regulation for the protection of winter-run Chinook that prohibited the retention of Chinook salmon in the Sacramento River from Bend Bridge to the Carquinez Bridge from January 1 (formerly January 15) through July 15. To facilitate enforcement of angling regulations in the lower American River, the emergency action also prohibited the retention of Chinook salmon in the American River from the Jibboom Street Bridge to the river mouth from January 1 (formerly January 15) through July 15, the same no-retention period as the mainstem Sacramento River in that area. The emergency regulation went into effect January 1, 2003.

The emergency action was based on recoveries of coded-wire tagged (CWT) winter-run Chinook (from the U.S. Fish and Wildlife Service's (USFWS) artificial propagation

program) recovered by the Department's Central Valley Salmon and Steelhead Inland Harvest Monitoring Project. Tag recoveries indicated that a relatively high inland sport harvest of winter-run Chinook salmon occurred in early January 2001, immediately prior to the no-retention period, in the Bend Bridge to Carquinez Bridge area. During the following season when the emergency regulation was in effect, no CWT winter-run Chinook were recovered in the inland harvest monitoring program in December 2002, indicating that the emergency regulation was effective in precluding inland harvest of winter-run in 2002-2003.

The proposed regulation change would make permanent the emergency action approved on October 24, 2002, and would clarify the regulations by designating Red Bluff Diversion Dam (instead of Bend Bridge) as a consistent boundary between river reaches identified in Sections 7.50(b)(156)(F)(G) and (H).

This regulation proposal also consists of an adjustment of the fishery management reaches in the main stem Sacramento River near Red Bluff that simplifies the regulations and provides more fishing opportunity for late fall-run Chinook while maintaining protection for winter-run Chinook. Current regulations define a reach from Deschutes Road Bridge (near Redding) to Bend Bridge (approximately 5 miles upstream from the town of Red Bluff), and an adjacent reach from Bend Bridge downstream to the Carquinez Bridge. The river reach between Bend Bridge and the Red Bluff Diversion Dam (RBDD) consists of a salmon fishery that is more characteristic of the reach above Bend Bridge than the reach below RBDD. In addition, CWT winter-run Chinook have not been recovered in sampling efforts between RBDD and Bend Bridge. The Department recommends using RBDD as a demarcation between the upper and lower reaches described above, instead of Bend Bridge. This would allow the five miles between Red Bluff and Bend Bridge to remain open for salmon retention until January 15, while the area below RBDD would close two weeks earlier on January 1 for the protection of winter-run Chinook. The area 500 feet upstream and 1,375 downstream of RBDD remains closed to fishing as defined in current regulations. The Department is recommending that the geographic reference point for 1,375 feet below RBDD be defined as 150 feet downstream of the Lower Red Bluff (Sycamore) boat ramp. The change is recommended for the purposes of improving clarity of existing regulations.

Supplemental Information

An artificial propagation program for winter-run was initiated by the USFWS at Coleman National Fish Hatchery (CNFH) in 1989. In 1998, the USFWS transferred propagation of winter-run Chinook to Livingston Stone National Fish Hatchery on the main stem Sacramento River below Keswick Dam. Beginning with the 1998 brood year, significant numbers of juvenile winter-run were reared and released into the upper Sacramento River. All hatchery-reared winter-run Chinook are externally marked with an adipose fin clip and are internally tagged with a CWT.

The Department's Central Valley Salmon and Steelhead Inland Harvest Monitoring Project was initiated in 1998. This program is designed as a long-term monitoring program to develop annual estimates of total in-river harvest of sport fish from the Sacramento River and major tributaries. Several CWT winter-run Chinook from the 1998 brood year (the first year of significant propagation releases) were recovered as three-year-old adults in late December 2000 and the first two weeks of January 2001 in the Harvest Monitoring Project. The program applies expansion factors for fish observed in the survey, based on estimates for time and area not sampled. The winter-run CWT recoveries from this survey in 2000/2001 and associated expansion factors were:

Brood Year	Coded-Wire Tag Code	Recovery Date	River Mile of Recovery (Sacramento River)	Approximate Recovery Location	Creel Survey Expansion Factor
1998	501020907	12/28/2000	RM 137	Colusa	8.2
1998	501020811	12/29/2000	RM 21	Isleton	13.7
1998	501020904	1/4/2001	Unknown	Sacramento River	1*
1998	501020906	1/6/2001	RM 178	Butte City	22.4
1998	501020906	1/6/2001	RM 183	Ord Ferry	22.4
1998	501020908	1/7/2001	RM 89	Knights Landing	7.9
1998	501020905	1/7/2001	RM 89	Knights Landing	7.9
1998	501020908	1/14/2001	RM 209	Hamilton City	22.4
Estimated total hatchery-reared winter-run Chinook harvested =				106	

* Fish returned by angler to USFWS – Red Bluff Office, no expansion factor applied

The estimated total number of hatchery-reared, winter-run Chinook harvested in the inland sport fishery in 2000/2001 is therefore 106. To determine the proportion of hatchery-reared fish that were harvested in 2000/2001, then, the ratio of expanded CWT recoveries in the river harvest to the total estimated number of CWTs in the 2000/2001 escapement was calculated:

Estimated CWTs in the inland sport harvest	=	106
Estimated CWTs from age 2 fish in winter-run carcass survey	=	108
Estimated CWTs from age 3 fish in winter-run carcass survey	=	309
Estimated CWTs in Keswick trap operations	=	12

The proportion of hatchery-reared winter-run in the 2000/2001 escapement that were harvested in the inland fishery, therefore, is estimated as:

$$\frac{106}{106 + 108 + 309 + 12} = .20$$

CWT hatchery-reared winter-run Chinook can be considered surrogates for naturally produced winter-run Chinook, assuming that the hatchery and naturally-produced fish have similar run timing and similar vulnerability to inland sport harvest. The proportion of the total winter-run Chinook escapement (hatchery and naturally-produced) in 2000/2001 that was harvested in the inland fishery is therefore also estimated at 20%.

In December 2001 and January 2002, no CWT winter-run Chinook were recovered in the inland harvest monitoring program. However, the inland harvest program was sampling with reduced effort in 2001/2002. In addition, far fewer fish from the 1999 brood year, returning as three year old fish in 2001/2002, were coded-wire tagged than in the 1998 brood year (154,000 fish in BY1998 compared to 32,000 fish in BY1999).

In light of the data described above, further protective measures for winter-run Chinook were warranted. Data indicated that changing the timing of the no-retention period for salmon in the Sacramento River would significantly reduce or eliminate inland harvest of winter-run Chinook, while allowing harvest of other Chinook salmon runs.

Potential impacts of the proposed regulation change on the angling public were analyzed by evaluating the angling effort data from the Central Valley angler survey for January 1999 and 2000. In the month of January (January 1 – 14), fishing effort (number of angler hours) was relatively low in the Carquinez Bridge to Red Bluff area compared to other months when retention of salmon is allowed (Figure 1). The highest effort for Chinook salmon occurred in September and October of each year, for fall-run Chinook. The action extending the no-retention period for Chinook salmon to January 1, however, would have

eliminated fishing opportunity (angler-hours) for Chinook salmon in this area in 1999 and 2000 as follows:

January 1 - 14	
Total Angler Hours for Chinook Salmon – Carquinez Bridge to Red Bluff	
Year	
1999	6,768 hours
2000	8,716 hours

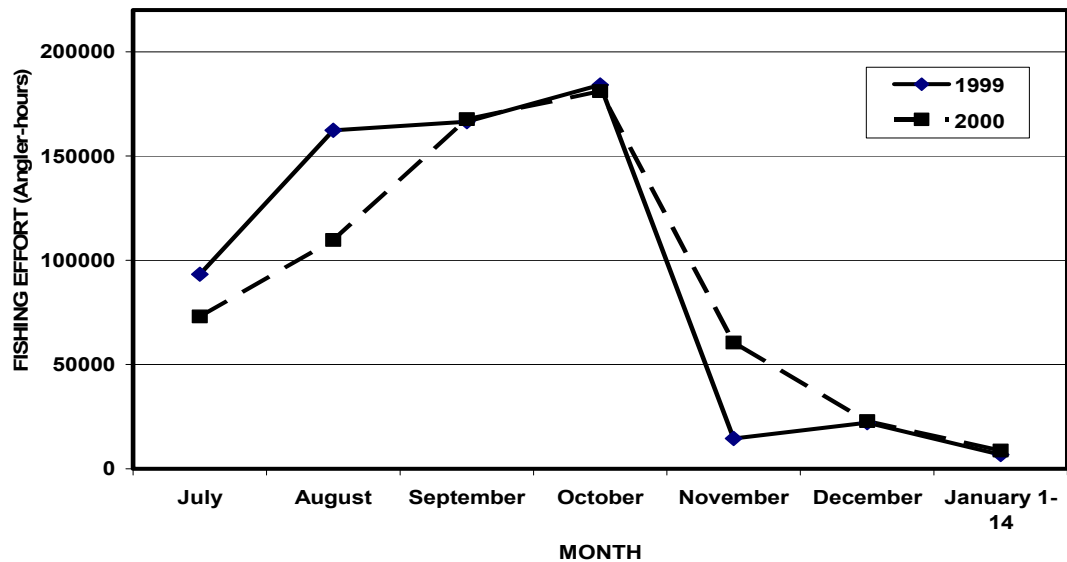


Figure 1. Estimated fishing effort (total number of angler hours) for Chinook salmon in the Sacramento River from Carquinez Bridge to Red Bluff (Central Valley Salmon and Steelhead Harvest Monitoring Project, 1999 and 2000 data).

- (b) Authority and Reference Sections from Fish and Game Code for Regulation:

Authority: Sections 200, 202, 205, 215, 220, and 315, Fish and Game Code.

Reference: Sections 200, 205, and 215, Fish and Game Code.

- (c) Specific Technology or Equipment Required by Regulatory Change: None.

- (d) Identification of Report or Documents Supporting Regulation Change:
None

- (e) Public Discussions of Proposed Regulations Prior to Notice Publication: None

Dates and Locations of Scheduled Hearings:

October 24, 2002
Crescent City

IV. Description of Reasonable Alternatives to Regulatory Action:

- (a) Alternatives to Regulation Change: None was identified.
- (b) No Change Alternative: Maintaining current regulations would not provide adequate protection of endangered winter-run Chinook salmon in the Sacramento River.
- (c) Consideration of Alternatives: In view of information currently possessed, no reasonable alternative considered would be more effective in carrying out the purposes for which the regulation is proposed or would be as effective and less burdensome to affected private persons than the proposed regulation.

V. Mitigation Measures Required by Regulatory Action:

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed.

VI. Impact of Regulatory Action:

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

- (a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businessmen to Compete with Businesses in Other States: The proposed action will not have a significant statewide adverse economic impact affecting businesses, including the ability of California businesses to compete with businesses in other states. Several local fishing guide services for resident trout, steelhead trout, and Chinook salmon operate in the Bay-Delta and the Sacramento River. These businesses may be impacted by the increased no-retention period for Chinook salmon proposed in this action. However, analysis in Section III indicates that angling effort was relatively low in the January 1-14 period. Fishing regulations on the Sacramento River upstream from Red Bluff Diversion Dam would not be affected by the proposed action; regulations for resident and steelhead trout would also not be affected.
- (b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California: None.
- (c) Cost Impacts on Private Persons or Business: The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in a reasonable compliance with the proposed action.
- (d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State: None.
- (e) Other Nondiscretionary Costs/Savings to Local Agencies: None.
- (f) Programs Mandated on Local Agencies or School Districts: None.
- (g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4: None.
- (h) Effect on Housing Costs: None.

Informative Digest/Policy Statement Overview

Sacramento River winter-run Chinook salmon were listed as endangered by the Fish and Game Commission (Commission) on September 22, 1989. The National Marine Fisheries Service listed the run as endangered under the Federal Endangered Species Act in February 1994. Although there has been some recovery in recent years, the winter-run Chinook population remains well below levels defined for recovery of the run.

Angling regulations adopted by the Commission in 1990 for the mainstem Sacramento River were designed to prevent harvest of upstream migrating winter-run Chinook salmon and other depleted stocks. Based on the best available data at the time these regulations were implemented, the no-retention periods for Chinook salmon in the Sacramento River were expected to cover the entire period when adult winter-run would occur in these areas.

However, recent data from the Department's Central Valley Salmon and Steelhead Harvest Monitoring Project indicate that a relatively high inland sport harvest of winter-run Chinook salmon may have occurred in late December 2000 and early January 2001, immediately prior to the no-retention period. Based on these data, an emergency regulation change was approved by the Commission on October 24, 2002, and went into effect January 1, 2003. The emergency action prohibited the retention of Chinook salmon in the Sacramento River from Bend Bridge to the Carquinez Bridge from January 1 (formerly January 15) through July 15, and in the American River from the Jibboom Street Bridge to the mouth from January 1 (formerly January 15) through July 15.

The proposed action would make permanent the emergency action approved on October 24, 2002, and would clarify the regulations by designating Red Bluff Diversion Dam (instead of Bend Bridge) as a consistent boundary between reaches identified in Sections 7.50(b)(156)(F)(G) and (H). The proposal also includes establishing a point 150 feet below the Lower Red Bluff (Sycamore) boat ramp as a reference point for defining the area closed to fishing below RBDD rather than the current point that is just a 1,375-foot measurement.

This regulation proposal also consists of an adjustment of the fishery management reaches in the main stem Sacramento River near Red Bluff that simplifies the regulations and provides more fishing opportunity for late fall-run Chinook while maintaining protection for winter-run Chinook. Current regulations define a reach from Deschutes Road Bridge (near Redding) to Bend Bridge (approximately 5 miles upstream from the town of Red Bluff), and an adjacent reach from Bend Bridge downstream to the Carquinez Bridge. The river reach downstream of Bend Bridge to the Red Bluff Diversion Dam (RBDD) consists of a salmon fishery that is more characteristic of the reach above Bend Bridge than the reach below RBDD. In addition, CWT winter-run Chinook have not been recovered in sampling efforts between RBDD and Bend Bridge. The Department recommends using RBDD as a demarcation between the upper and lower reaches described above, instead of Bend Bridge. This would allow the five miles between Red Bluff and Bend Bridge to remain open for salmon retention until January 15, while the area below RBDD would close two weeks earlier on January 1 for the protection of winter-run Chinook.